

Claims

1. Pin boss (18) of a piston (6) for an internal combustion engine,
 - having a pin bore (1) for accommodating a piston pin, which has an inside surface (2) having a non-profile-bored region (17),
 - having an oil circulation groove (4, 29) and a transverse groove (5, 24, 26), which are disposed in the non-profile-bored region (17) of the inside surface (2), whereby the transverse groove (5, 24, 26) lies at least approximately parallel to the longitudinal axis (3) of the pin bore (1) and has an outflow opening (14, 28) for draining off cooling oil, on the outside of the piston, and whereby the oil circulation groove (4, 29) is disposed circular to the longitudinal axis (3) and crosses the transverse groove (5, 24, 26), and
 - having an oil supply bore (9) that opens into the oil circulation groove (4, 29), which bore is connected with an oil inflow opening (13) disposed on the outside of the piston, by way of an oil inflow (10).

2. Pin boss according to claim 1, **characterized in that** the transverse groove (5) is disposed in the half of the pin bore (1) that faces the piston crown or in the half that faces away from the pin crown.
3. Pin boss according to one of the preceding claims, **characterized in that** the oil circulation groove (4) runs over the entire circumference of the inside surface (2) of the pin bore (1).
4. Pin boss according to one of the preceding claims, **characterized in that** the oil inflow opening (13) comprises, in part, an oil control ring groove (11) disposed on the outside surface of the piston (6), and, in part, a region on the side of the oil control ring groove (11) facing the crank shaft.
5. Pin boss according to one of the preceding claims, **characterized in that** the oil supply bore (9) is disposed parallel to the longitudinal axis (8) of the piston (6), and hits the pin bore (1) at a tangent in the region of the oil circulation groove (29), in such a manner that an opening

(30) is formed between the oil supply bore (9) and the oil circulation groove (29).

6. Pin boss according to claim 5, **characterized in that** the oil circulation groove (29) is disposed in the equator region and the nadir region of the pin bore (1).